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EXAMINER

ZURITA, JAMES H

ART UNIT PAPER NUMBER

3625

DATE MAILED: 02/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/372,750

Applicant(s)

BROWN ET AL.

Examiner

James Zurita

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9, 11-18 and 20-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9, 11-18, 20-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Request for Continuing Examination

On 6 December 2002, Applicants filed a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Response to Amendment

Applicants' amendment of 4 November 2002 has been entered. Applicants amended claims 32, 37 and 41 and traversed rejection of remaining claims.

Claims 2-9, 11-18 and 20-48 are pending and will be examined.

Response to Arguments

Applicants' arguments have been fully considered but they are not persuasive.

Applicants traversed Examiner's Official notice that shell extensions and shells access operating system commands on their own or with application interfaces (see Amendment B, page 5, line 9).

In response to this argument, the traversal to Examiner's Official notice does not constitute an adequate traversal because applicant has not specifically pointed out the supposed errors in the examiner's action, which would include stating why the noticed

fact is not considered to be common knowledge or well-known in the art. 27 CFR 1.104(d)(2), MPEP 707.07(a).

Further, Examiner's Official notice is consistent with Applicants own prior art disclosures concerning the use of operating systems, shells, shell extensions and access to files. See at least the following locations: page 1, lines 13-19, page 3, lines 1-10, page 4, lines 3-17, page 7, lines 1-16, page 10, lines 13-20. See also at least applicant's references to shells and shell extensions such as MICROSOFT WINDOWS FILE EXPLORER (page 7, lines 1-5) and Fig. 5, which show a shell extension to a MS/WINDOWS operating system. See also discussion of operating systems, shells and shell extensions, below.

Applicants argue that Examiner has failed to establish a prima facie case of obviousness, and that Examiner has failed to provide any citations to Enomoto teaching *an operating system*, including an *operating system desktop shell interface* and an *extension to the operating system desktop shell interface* [the shell extension supplying third image data to a user station]. Amendment, page 5, lines 13-14. Examiner will first address issues related to operating systems shells and shell extensions and secondly address applicants' reference to third image data.

First, Enomoto *does not* use the terms "operating system" "shell" and "shell extension to an operating system desktop shell interface." Enomoto teaches the use of personal computers, i.e., applicants' user stations. See at least references to personal computer, item 11, Col. 3, line 10-Col. 8, line 53. A personal computer (often called a PC, a desktop computer, etc.) is a computer that serves one user. A personal computer

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may be used at home and in the office for almost all applications traditionally performed on large computers.¹ Personal computers such as disclosed by Enomoto have *operating systems*. An operating system is the master control program that runs a computer. Operating systems such as Macintosh, DOS, Windows are designed for one person at a desktop computer. Windows NT and UNIX are network operating systems because they are designed to manage multiple user requests at the same time.² A user interface (i.e., shell or shell extension) allows a user to interact with an operating system. Operating systems may allow for different shells. For example, DOS and UNIX provide command-driven interfaces but can host other shells that provide a menu-driven or graphical interface. Windows (which is graphics-based to begin with) allows other shells to provide an interface to a user.³

Secondly, Applicants use the terms first, second and third image data to refer to how images are supplied to a personal computer: First image data are images supplied via cameras and scanner applications; Second image data are images supplied via photo editing applications. First and second image data have been addressed in prior office actions.

Applicants use the term *third image data* to refer to image data that may be accessed with user interfaces (i.e., shells and shell extensions to an operating system) such as WINDOWS FILE EXPLORER, which provides access to files in a WINDOWS operating system. The interface allows users to supply pictures from an operating system. Users may use a shell extension to supply files (including bundled JPEG files

¹ Personal Computer. Computer Desktop Encyclopedia. American Management Association. 1996.

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and ZIP files) via a network to a server. See at least disclosures, page 7, lines 1-16, and Fig. 5. As applicants admit, images may be held in JPEG and ZIP file formats are well known (see at least disclosures, page 10, lines 13-16).

Enomoto *does not* use the term *third image data*, but discloses that image data may be in JPEG format (see at least Col. 6, lines 34-43) or other types of data compression formats. Enomoto discusses the use of disks (see at least Col. 3, lines 21-30). Enomoto discloses other types of disks that may contain image data, including DVD (Digital Video Disc), FD (floppy disk), MO (magneto-optic) and CD (Compact Disc). See at least Col. 8, lines 27-33. These types of disks may contain image files. A file is a collection of bytes stored as an individual entity; data on disks is stored as files with assigned file names that is unique within the directory where the file resides.⁴ Enomoto discloses the use of libraries (see at least Col. 8, lines 33-41). A library is a collection of programs or data files.⁵ Users may access files on various types of disks and libraries via file system interfaces (i.e., shells and shell extensions to operating systems), such as WINDOWS FILE EXPLORER. As applicants disclose, different operating systems may use other file access interfaces (see at least disclosures, page 19, lines 13-16). These interfaces supply what applicants refer to as *third image data*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Enomoto and well-known file system interfaces (i.e., shell and shell extensions to operating systems) and permit PC/desktop users to

² Operating System. Id

³ Ibid.

⁴ File. Id.

⁵ Library. Id.

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supply, via user interfaces, digital image data by accessing files on a personal desktop computer's disks, such as personal desktop computer's hard disk(s), floppy disk(s), DVD, FD, MO and CD.

One of ordinary skill in the art at the time the invention was made would have been motivated to combine Enomoto and well-known file system interfaces (i.e., shell and shell extensions to operating systems) and permit PC/desktop users to supply, via user interfaces, digital image data by accessing files on a personal desktop computer's disks, such as personal desktop computer's hard disk(s), floppy disk(s), DVD, FD, MO and CD, for the obvious reason that by including shells and shell extensions to operating systems such as WINDOWS FILE EXPLORER, users are provided with convenient, delightful, easy to use interfaces that allow them to manipulate file image data. For example, users may copy files from one drive to another via such interfaces. It is well known that users prefer easy-to-use commands and graphical interfaces to manage their files and data. Without such interfaces and extensions, users may feel overwhelmed or frustrated by having to enter obscure, non-intuitive operating system commands. Users who are unable to remember operating system commands may well avoid carrying on electronic commerce over the Internet, for example. On the other hand, well-designed, intuitive interfaces permit users to feel comfortable in performing complex operations such as moving a file from a local disk to a network drive. This creates a general feeling of satisfaction, delight and well being and permits users wide use of electronic commerce applications such as ordering customized products that

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contain images created by users. Companies that create user-friendly interfaces find their products in great demand, thereby increasing their sales and profits.

Applicants argue that Enomoto teaches transmitting order information *together* with the digital image data, in contrast to their invention, which teaches uploading a digital image to an external network entity subsequent to exchanging ordering information (Amendment B, page 6, lines 10-14). These arguments are not persuasive for at least the following reasons.

First, Enomoto does not transfer ordering information *together* with digital image data. Enomoto discloses that uploading the digital image to an external network entity may take place *subsequent* to placing what Enomoto refers to as pre-order data. Applicants include the text of Enomoto Col. 2, lines 23-27 and Col. lines 51-53. The following text includes Col. 2, lines 28-51, i.e., the remaining text of Examiner's original citation:

. . . The reception processing device of the order receiver, such as a large scale computer, stores the digital image data and the relating print order data, and commands a digital printer to make prints from the image data in accordance with the print order data.

Consequently, the user need not go to the D.P.E. agent, but can place an order for digital prints through personal computer after processing the image data as the user likes. On the side of photofinisher, it is possible to automate the management of the entire process from reception through printing to delivery, so that efficiency and speed of photofinishing is remarkably increased.

It is *preferable to send at first pre-order data* from the order sender to the order receiver, the pre-order data indicating data quantity of the image data and those data pieces of the print order data which are necessary for calculating the earliest possible delivery date and the charge for the ordered prints. According to this embodiment, the reception processing device calculates the print charge and the delivery date based on the pre-order data, and sends back data of the calculated print charge and delivery date to the order sender. In view of the charge and delivery date, the *order sender can decide whether to pursue the print order or cancel it*.

[subsequently] When to pursue the print order, the order sender transfers the entire print order data, *including the digital image data and the print order data*, to the reception processing device. Then the reception processing device stores the entire print order data and sends a print command to the digital printer. The reception processing device also decides an accept number for managing the print order data, the digital image data and produced prints with reference to the accept number (*emphasis added*).

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Thus, a user first sends what Enomoto calls pre-order data. Enomoto describes pre-order data to include:

The print pre-order data consists of the print option data, the expected delivery date designation data and data of image data size or data quantity. These data pieces are [also] included in the print order data. (Col. 6, lines 51-54).

Enomoto shows that *subsequently*, a user may transfer [i.e., upload] the entire print order data, including the digital image data and the print order data [to an external network entity]:

The user 10 selects or designates the order execution after confirming the delivery date and the charge on the screen, then the personal computer 11 sends the entire print order data to the work station 13. The entire print order data is constituted of all the print order data *and the image data* for print. The work station 13 controls the entire print order data based on the accept number, and stores it into the memory device 14. (Col. 7, lines 14-22, emphasis added)

The interpretation is also consistent with Enomoto's stated purpose for the above sequence. Namely, a user may submit pre-order data, obtain an estimate of price and delivery delay in fulfilling an order, and yet decide that the estimates are not acceptable after receiving a network entity's estimate. See also Fig. 3 and related steps and description, found in Col. 5, line 66-Col. 9, line 8.

Second, while Applicants do not define the term *ordering information*, applicants identify what items may be included prior to uploading digital images:

In the present invention, the NAP module 216 launches a conventional Web browser which allows the consumer 1 to directly interact with the network sales server 220 to view the products and prices and to place the order by specifying the desired information, namely *quantities*, *products*, *sizes*, etc., of the desired products before any of the images are uploaded by the NAP module 216. (page 5, lines 8-12).

By waiting until the order is complete, before uploading the digital images, the NAP module 216 (increases the speed of the ordering process. The NAP module 216 achieves this goal by maintaining the images to be uploaded on the memory at the computer 210, until the order is complete.

Thus, applicants' "ordering information" may be interpreted to include size and quantity. This information is consistent with Enomoto's use of the term pre-order data, i.e., order data that is exchanged prior to uploading image.

Third, In further response to applicants' argument, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Drawings

The corrected or substitute drawings were received on 23 April 2002. They are acceptable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 16, 26 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims refer to *delays* in uploading [of images] until an *order [. . .] is complete*. While applicants use the term "waiting until an order is complete before uploading the digital images," applicants do not point out what actions by a user or a server, or what constitutes completion of an order. For purposes of this examination,

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Examiner will give the terms delay, order and ordering in their broadest reasonable interpretation.

Claims 4, 13, 22, 32, 35, 37, 39, 41, 44, 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims refer to ordering information. The term *ordering information* does not appear in the disclosures and is not defined by the claims. While the disclosures refer to *order* information, it is unclear what information must be provided by a user to properly place an order or what constitutes information sufficient to place an order. For purposes of this Examination, Examiner will give the terms ordering information and order information their broadest reasonable interpretation to include any type of data provided by a user to a service when placing an order.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-9, 11-18 and 20-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto et al. (US Patent ,5,974,401)/*Enamoto* in view of Garfinkle (US Patent 6,017,157)/*Garfinkle*.

Enomoto discloses methods, systems, networks, computer programs and signals for on-line ordering, fulfilling and delivering products such as photographic prints based on customer orders. Enomoto also describes that ordering may take place prior to uploading images to the system from a user station, where they are first stored.

Enomoto includes functions such as exchanging, storing, sending/receiving, displaying, connecting, ordering, uploading digital image information and producing products from the information. Enomoto discloses at least the following:

- user personal desktop computer station(s) for receiving digital images (see at least Col. 1, line 40-Col. 2, line 32 concerning the types of images that may be received and stored at a user station). The user station may run camera/scanner application programs for supplying (first) image data to a user station (see at least Col. 1, line 40-Col. 2, line 32);
- photo-editing application program(s) for supplying (second) image data to a user station (see at least Col. 3, lines 41-54; the software carries out different types of formatting and editing of digital images, including image correction, etc.

Enomoto also discusses digital device interface applications in image processing programs and software, see also at least rejection of claims 3, 9, above);

- a network sales/order processing server(s) for receiving an order and for receiving any one a first, second, and third image data image data from a user station after receiving an order (see at least references to order receiver that receives images, order request information and produces prints, Col. 1, lines 51-Col. 2, line 32);

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- establishing a network connection between client(s) and server network entities (see at least references to connections on networks, including the *Internet*, Col. 3, lines 21-30, See also at least references to web sites, Col. 6, lines 5-15) using a network access protocol module capable of receiving images, order information and merchandise availability information from an external network entity (see at least Col. 2, lines 40-60, where Enomoto discloses that print sizes and print formats may be available or not available at a fulfillment center such as a photo-finisher. See also references to TCP/IP, a network protocol present on clients and servers that permits communication and transfer of information across the Internet);
- exchanging ordering information for digital-image-related services (see at least Col. 2, lines 41-60);
- uploading digital images to servers (including one or more external network entity) subsequent to exchanging ordering information (Col. 2, lines 23-60, which discusses that digital images are sent to an order receiver after order data is received). See also response to arguments, above, for discussion of what constitutes applicants' "ordering information."
- processing an order based on any one of a first, second, and third image data, and outputting any one a first, second, and third image data (see at least Col. 5, lines 43-65, concerning processing of orders and outputting various images);
- a photofinishing lab for producing photographic-quality print images based on an order and any one a first, second, and third image data from a network

sales/order processing server (see at least references to photo-finisher, Col. 3, lines 10-53, Col. 8, lines 42-53).

Enomoto discloses the use of digital photographic image(s) (see at least Col. 2, lines 10-32). Enomoto discloses a plurality of different sources for digital images, including image processing programs, a digital device interface application and a shell extension. See at least Col. 2, lines 10-31, which discusses that sources may include image input devices such as digital scanners, image scanner, computer graphics device and video capture. Enomoto also discusses the use of digital device interface applications in image processing programs and software. See at least Col. 3, lines 41-54. The software carries out different types of formatting and trimming, i.e., editing, of digital images, including image correction, etc. Commercially available image processing software may also include MICROSOFT PICTUREIT, as mentioned by applicant. Shells and shell extensions (i.e., user interfaces), as described by applicants on page 3, lines 1-10, page 4, lines 10-15, 7, lines 7-16, page 8, lines 11-16, are well known in the computer arts, and may include MICROSOFT EXPLORER).

Enomoto discloses that an image-related service generates at least one of photographs and merchandise with photographs imprinted thereon (Col. 5, lines 11-29; Col. 7, lines 53-60; Col. 10, lines 9-27). Enomoto shows that one may first send pre-order data to an order receiver, and follow this by sending image data (see at least Col. 2, lines 40-58). Enomoto discloses various processes for checking and improving quality of digital images, including editing, formatting, image correction, color correction

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and format (see at least Col. 2, lines 10-32, Col. 3, lines 32-60, which discusses types of editing routines and formatting of digital images).

Enomoto *does not* specifically use the words operating system, shell or shell extension to operating systems to access operating system commands.

As discussed in response to arguments, Enomoto teaches the use of PC's/desktops i.e., applicants' user stations. See at least references to personal computer, item 11, Col. 3, line 10-Col. 8, line 53. It is well known that a personal computer is a computer that serves one user; a personal computer may be used at home and in the office for almost all applications traditionally performed on large computers.⁶ Personal computers such as disclosed by Enomoto have *operating systems*. An operating system is the master control program that runs a computer. Operating systems such as Macintosh, DOS, Windows are designed for one person at a *desktop computer*. Windows NT and UNIX are network operating systems because they are designed to manage multiple user requests at the same time.⁷ A user interface, or shell, provides the interaction between a user and the operating system. Operating systems may allow for different shells. For example, DOS and UNIX provide command-driven interfaces but can host other shells that provide a menu-driven or graphical interface.

Enomoto discusses the use of disks (see at least Col. 3, lines 21-30). Enomoto discloses other types of disks that may contain image data, including DVD (Digital Video Disc), FD (floppy disk), MO (magneto-optic) and CD (Compact Disc). See at least Col.

⁶ Personal Computer. Computer Desktop Encyclopedia. American Management Association. 1996.

8, lines 27-33. These types of disks may contain image files. A file is a collection of bytes stored as an individual entity. All data on disk is stored as files with assigned file names that is unique within the directory where the file resides.⁸ Enomoto discloses the use of libraries (see at least Col. 8, lines 33-41). A library is a collection of programs or data files.⁹ Users may access files on various types of disks and libraries via file system interfaces (i.e., shells and shell extensions to operating systems), such as WINDOWS FILE EXPLORER. As applicants disclose, different operating systems may use other file access interfaces (see at least disclosures, page 19, lines 13-16). Windows (which is graphics-based to begin with) allows other shells to provide an interface to a user.¹⁰

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Enomoto and well-known file system interfaces (i.e., shell and shell extensions to operating systems) to permit users of personal desktop computers (i.e., applicants' user station) to access files on a personal desktop computer's disks, such as personal desktop computer's hard disk(s), floppy disk(s), DVD, FD, MO and CD.

One of ordinary skill in the art at the time the invention was made would have been motivated to combine Enomoto and well-known file system interfaces (i.e., shell and shell extensions) to permit users of personal desktop computers (i.e., applicants' user station) to access files on a personal desktop computer's disks, including a personal desktop computer's hard disk(s), floppy disk(s), DVD, FD, MO and CD, for the

⁷ Operating System. Id

⁸ File. Id.

⁹ Library. Id.

¹⁰ Ibid.

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obvious reason that by including shells and shell extensions such as WINDOWS FILE EXPLORER, users are provided with convenient, delightful, easy to use interfaces that allow them to manipulate file image data. For example, users may copy files from one drive to another via such interfaces. It is well known that users prefer easy-to-use commands and graphical interfaces to manage their files and data. Without such interfaces and extensions, users may feel overwhelmed or frustrated by having to enter obscure, non-intuitive operating system commands. Users who are unable to remember operating system commands may well avoid carrying on electronic commerce over the Internet, for example. On the other hand, well-designed, intuitive interfaces permit users to feel comfortable in performing complex operations such as moving a file from a local disk to a network drive. This creates a general feeling of satisfaction, delight and well being and permits users wide use of electronic commerce applications such as ordering customized products that contain images created by users. Companies that create user-friendly interfaces find their products in great demand, thereby increasing their sales and profits.

Enomoto *does not* specifically use the term "code segment" when describing the different functions of his invention. As noted in prior office actions, it is well known that in computer systems, functions are implemented with computer code. The functions code may be called programs, modules, applets, executables, load modules, code segments, scripts, etc.

Enomoto *does not* specifically name other types of image-related services provided by an order receiver. However, it is well known to place images, including digital photographic images, on products such as mugs and T-shirts.

Therefore, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time the invention was made to apply Enomoto's on-line digital print order and delivery system and include shells and shell extensions to operating systems, code segments for printing digital photographic images on other types of products, including gifts and merchandise.

One of ordinary skill in the art of electronic commerce at the time the invention was made would have been motivated to combine Enomoto's on-line digital print order and delivery system and include shells, shell extensions to operating systems, code segments for printing digital photographic images on other types of products, including gifts and merchandise for the obvious reason that customers often enjoy having images of loved ones on T-shirts, cups and other items. Personalization and customization of merchandise greatly enhances customer appreciation for loved ones, and there is a great demand for such gifts and products, which in turn benefits commerce because items are sold and purchased.

It is well known that shells and shell extensions of an operating system may be used to access digital images from a file system. With shells, one may access file system commands to move one or more files to/from various directories for use by application programs and interfaces. When software is written, it is common practice to make use of operating system calls for file access and I/O processes, etc. As noted

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previously, shell programming and extensions are well known in the art. For example, various e-mail user agent programs use operating system shells and extensions for attaching files to e-mail messages.

WWW is accessible via a network access protocol called Transmission Control Protocol/Internet Protocol, TCP/IP for short. TCP/IP and WWW include a family of *plug-in*'s, modules and protocols such as File Transfer Protocol, Telnet. One may include time delays using JAVASCRIPT, JAVA, or their MICROSOFT equivalent. For example, a user may click on a Web page object to initiate actions that may be delayed by applets or JAVASCRIPT.

Enomoto does not discuss the use of plug-in's. Garfinkle discloses the use of file systems and directories (see at least Col. 5, lines 63-67; Col. 6, lines 37-49, describing directories and file such as images stored in JPEG format). Garfinkle describes the use of *plug-in* modules (see at least Col. 5, lines 1-10). Garfinkle discloses the use of file systems and directories (see at least Col. 5, lines 63-67; Col. 6, lines 37-49, describing directories and file systems that may exist in various shell extensions and may hold JPEG and other type of digital images).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Enomoto and Garfinkle and well known information about the WWW to include accessing multiple images, using shell interfaces and *plug-ins*, and delaying outputting an image and its data to a server until an order for a plurality of images is complete.

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One of ordinary skill in the art at the time the invention was made would have been motivated to combine Enomoto and Garfinkle and well known information about the WWW to include accessing multiple images, using shell interfaces and *plug-ins*, and delaying outputting an image and its data to a server until an order for a plurality of images is complete for the obvious reason that shells, *plug-ins* are widely used on Internet browsers. In addition, it is well known and common to delay upload of images and to upload them in batches because of shortened transmission times, reduced utilization of resources.

Enomoto discloses storing images on a user's machine and sending images to a server while sending ordering information to the server. Enomoto *does not* specifically disclose the use of thumbnail images. Enomoto *does not* specifically disclose the use of a shell extension of an operating system to access digital image from a file system. See also discussion of operating systems, shells, shell extensions, user interfaces, files, etc., in response to arguments. Enomoto provides motivation for uploading thumbnail images in that they show that a user may wish to provide pre-order data, including size and quantity information prior to uploading digital images. Thus, Enomoto suggests providing information that would allow a network entity to estimate the cost of fulfilling an order. Thumbnail images are images that correspond to a full image. Thumbnail images are smaller in size than the full image. Thumbnails may be used to provide samples of a finished product in combination with specific images.

Garfinkle discloses the use of thumbnail images corresponding to any one of a plurality of images, and sending orders to a network sales/order processing server (see at least Col. 5, lines 10-30, Col. 6, line 56-Col. 7, line 15, Col. 8, lines 8-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Enomoto and Garfinkle and disclose the use of thumbnails in a order and fulfillment system. One of ordinary skill in the art at the time the invention was made would have been motivated to combine Enomoto and Garfinkle and disclose the use of thumbnails in a order and fulfillment system for the obvious reason that by providing thumbnail images, it is possible for users to see more data on a screen and focus on the ones they select. In addition, by providing thumbnail images, a server may cut down on transmission time and storage prior to selection by a user. Thumbnail images may be stored and transferred across networks in manners similar to regular sized images.

Enomoto discloses displaying on a user station one or more image(s) stored on the local user station. Since thumbnail images are another type of image, the combination of Enomoto and Garfinkle disclose displaying one or more thumbnail image(s). Relating to pointers to thumbnail image(s), Enomoto and Garfinkle *do not* disclose sending to a server pointer(s) to image(s), including thumbnail images, that are stored on a local user station.

Enomoto and Garfinkle *do not* disclose that a network access protocol module sends said network sales/order processing server a pointer to a thumbnail image locally stored at said user station.

Pointers are variables that contain information concerning logical or physical location of some data rather than the data itself. Data may be stored in various types of files and in many formats, including image files (such as JPEG digital photography and thumbnail image files). Applicants describe operating systems and file systems well known to those of ordinary skill in the art of electronic commerce. These O/S include WINDOWS 95, WINDOWS NT. See at least application, page 7, lines 11-13, and page 8, lines 19-21; on at least page 1, lines 13-16. For information necessary to locate a file, see at least applicants Fig. 5, and related text. While some file systems may require additional information, it is well known that with MICROSOFT WINDOW EXPLORER, one may locate a file by providing a directory name and the file's name within the directory, as shown in Fig. 5. An operating system shell would then be able to locate and access the data contained in a file, including a digital photography image file and a thumbnail image file.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Enomoto, Garfinkle, with knowledge generally available and disclose the use pointers (such as directory name and file name within a directory) to thumbnail images locally stored at a user station.

One of ordinary skill in the art at the time the invention was made would have been motivated to combine Enomoto, Garfinkle, with knowledge generally available and disclose the use pointers (such as directory name and file name within a directory) to thumbnail images locally stored at a user station for the obvious reason that providing pointers to thumbnail images stored on a user station allows a transaction to take place

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with smaller amounts of information being sent across a network. This decreased exchange of data permits reduced transmission time and reduced bandwidth utilization. All users of an electronic commerce system benefit, since the order information that needs to be sent across networks can be made up of text data exclusively. A list of pointers may be verified more easily at both client and server sites. In addition, a local user need not send image data itself until a full order has been agreed upon.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Zurita whose telephone number is 703-605-4966. The examiner can normally be reached on 8:30 am to 5:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

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James Zurita
Patent Examiner
Art Unit 3625
February 4, 2003


Jeffrey A. Smith
Primary Examiner